

## **Berkeley Device Modeling Center**

### **Affiliate Agreement**

This Agreement, effective on November 15, 2017 ("Effective Date") is by and between The Regents of the University of California, Berkeley, acting through its Industry Alliances Office, 2150 Shattuck Avenue, 10<sup>th</sup> Floor, Berkeley, CA 94704-6701 (hereinafter referred to as "UCB") and Huawei Technologies Co., LTD, having an address at Administration Building, Huawei Base, Bantian, Longgang District, Shenzhen, 518129 P.R. China (hereinafter referred to as "Member"). This Agreement ("Agreement") will govern the terms and conditions of Member's membership in UCB's Berkeley Device Modeling Center ("BDMC," or "Center").

#### **1. Background and Unique Resources**

The BDMC Affiliates Program is an industry membership program that is operated by UCB. The BDMC Affiliates Program exists to inspire, nurture and sustain a vibrant industrial-academic community focused on the development of device models for semiconductor industry's need, and their introduction into commercial use by the participation of Members.

Center membership fees support a unique research effort on modeling advanced and future generations of electronic devices, ensuring sustained support of the semiconductor industry's need for device models. The combination of UCB researchers with proven records of useful research and service to industry, industry leader members, and potential government funding agencies provides an environment for making truly significant contributions to research and industry.

BDMC seeks affiliation with industry and promotes interaction between academic researchers and industry to enhance the utility of UCB device modeling research. BDMC requires additional funds to sustain and expand its operations. Member desires to become a Member to support the BDMC and partake of its membership benefits.

#### **2. Program Management**

The BDMC shall be directed by a UCB faculty director or UCB faculty co-directors and advised by an industrial advisory board comprised of one representative of each Member ("Industrial Advisory Board").

#### **3. Cost**

During the Term, Member will provide to UCB an annual membership fee of \$80,000 as payment for its membership in the BDMC, which will increase 2% per year ("Annual Membership Fee"). Any other change to Member's Annual Membership Fee will not apply to previous membership periods, and can only be made by written amendment to this Agreement by duly authorized representatives of UCB and Member. The Annual Membership Fee shall be due forty-five (45) days following invoice from UCB.

Checks shall be made payable to UC Regents, indicating the purpose of the payment ("BDMC Membership"), should be sent to:



Contracts and Grants Accounting  
ATTN: Manager  
2195 Hearst Avenue, Room 130  
Mail Code 1103  
University of California  
Berkeley, California 94720-1103

Or if by electronic wire transfer to:

Bank of America  
Concord, California USA  
Routing No. 026009593  
Account No. 0175380001

UCB will invoice Member when payment is due. Invoice should be mailed or emailed to:

Huawei Technologies Co. Ltd.  
Administration Building,  
Huawei Base,  
Bantian, Longgang District,  
Shenzhen, 518129 P.R. China  
Attention: Ms. Jiang PinTing 00270396, Building D3

#### **4. Membership Benefits and Options**

As a member of BDMC, Member will be entitled to the following benefits:

- a. BSIM, Codes, Models and Software as further described in Section 5(a).
- b. Ability to influence research by assigning up to 50% of Annual Membership Fee to preferred Centerproject(s).
- c. A seat on the Industrial Advisory Board.
- d. Direct access to Centerfaculty and graduate students.
- e. Early networking with Centerstudents for internships and employment.
- f. In the event an Invention is developed from a project funded solely by pooled Center membership fees, Member shall have the rights outlined in Section 5(b).
- g. Possible early access to Inventions developed from Center projects funded by agencies of the Federal government or the State of California as further described in Section 5(d).
- h. Early access to all research projects funded by Center membership fees.
- i. Option of sending a visiting researcher to the Center as a Member of Center research team at additional cost.
- j. Option of funding the Center above and beyond the Annual Membership Fee. Member may assign any such voluntary membership fee to preferred Center project(s).

- k. Opportunity to propose and participate in joint research programs with Center faculty for funding by agencies of U.S. Government, State of California, or foundations.
- l. Members-only Center annual research review.
- m. Invitation to Berkeley EECS Annual Research Symposium (BEARS)

## 5. Intellectual Property and Licensing

a. Member Access to BSIM, Models and Codes. To the extent legally able and unless provided publicly elsewhere, BDMC will provide access to Berkeley Short-channel IGFET Model (BSIM) and other models and codes, and copyrightable software, developed by the BDMC in the performance of research conducted by BDMC under this Agreement ("Software") for Member's use as follows:

UCB shall grant to Member, subject to the terms and conditions of this Agreement, a fully paid, non-exclusive, royalty-free, non-transferable, perpetual, irrevocable, worldwide license to BDMC Software and updates. Upon receipt of the first Annual Membership Fee payment, UCB will release BDMC Software to Member. Member will remain eligible for new BDMC Software including updates and new releases, through the Term unless terminated early, including termination by failure to pay membership fees, in accordance with Article 3.

(b) Research projects solely funded by Membership Fees. All inventions conceived and first reduced to practice in the performance of research conducted by BDMC under this Agreement ("BDMC Inventions"), and all patent rights thereto, will belong to UCB, subject to UCB policy, and to UCB's legal obligations under Federal and State law. Rights to Inventions will be made available to Members by UCB's Office of Technology Licensing, subject to UCB's legal right to do so, as follows:

i. Internal Use To the extent that UCB shall have the legal right to grant, UCB shall grant to Member, subject to the terms and conditions of this Agreement, a non-exclusive, royalty-free, non-transferable, non-sublicensable license to patentable BDMC Inventions, funded solely by membership fees, for internal and non-commercial educational, research, and evaluation uses during the Term (hereafter, "Internal Use"). Licensed Member shall not redistribute without prior written permission from UCB's Office of Technology Licensing.

ii. Commercial Use To the extent that UCB shall have the legal right to grant, and in consideration of Member's good standing in payment of membership fees, Member shall have a time-limited right to negotiate with UCB's Office of Technology Licensing for a commercial non-exclusive or exclusive field of use royalty-bearing license or option to license for specific BDMC Inventions, funded solely by membership fees, beyond the Internal Use of the BDMC Inventions as provided under Article 5(a)ii. This right shall be no less than sixty (60) days to execute the

license in advance of such Inventions being made available to non-BDMC entities.

iii. All Members obtaining a non-exclusive license under this section shall pay a pro-rata share of out-of-pocket costs incurred by UCB for preparation, filing and prosecution of patent applications and maintenance of resulting patents.

(d) Research projects solely funded by Government. When the sole source of funds for a BDMC research project is from Federal/State Government sources awarded to the Center, rights to intellectual property developed under such funding will be governed by University of California or Federal/State policies in effect at that time. BDMC may apply for center grant funds (such as under NSF Industry/University Cooperative Research Centers Program). In the event Center is awarded such a Federal/State Government grant, Members may have a time-limited right for sixty (60) days to negotiate a royalty-bearing commercial license to Software or Inventions resulting from such funding.

The schedule of licensing provisions in this Section 5 does not convey any express or implied rights in any other intellectual property of UCB except for the specific license rights provided under Section 5(a) and 5(b) of this Agreement.

#### **6. Publication**

UCB will have the right to copyright, publish, disclose, disseminate and use, in whole or in part, any data or information developed under this Agreement.

#### **7. Term and Termination**

This Agreement will remain in effect for five (5) years from the Effective Date ("Term") or until terminated by either party, whichever occurs first. Either party may terminate the Agreement for convenience by providing written notice of such termination (Notice of Termination). Termination will be effective ninety (90) days from receipt of Notice of Termination (Effective Date of Termination). Member shall pay Annual Membership Fees up to but not beyond the Effective Date of Termination.

#### **8. Use of Name**

Except as required by law, Member agrees not to use the name "The Regents of the University of California," the name of any campus of the University of California, the name of the Berkeley Device Modeling Center, or any abbreviation or derivative of the foregoing, or the names of any of its faculty in any advertisement, publicity, or other release, with reference to this Agreement without the prior written consent of UCB's Business Contracts and Brand Protection office.

Official notices under this Agreement shall be rendered to:

For UCB Business:	For Member Business:
Eric Giegerich Director Industry Alliances Office	Liang Peng Huawei Senior Director, Technical Planning &

University of California, Berkeley 2150 Shattuck Avenue, 10th Floor Berkeley, CA 94720-6701	Strategy Futurewei Technologies, Inc. Direct: (408)-330-4513 2330 Central Expressway Santa Clara, CA 95050
For BDMC:	
Sayeeef Salahuddin 515 Sutardjai Hall Berkeley CA 94720 Phone: 510-642-4662 Email: sayeeef@berkeley.edu	

### 9. Indemnification

To the extent legally able, UCB shall indemnify and hold Member, its officers, employees and agents harmless from and against any and all liability, loss, expense (including reasonable attorneys' fees), or claims for injury or damages arising out of the performance of this Agreement but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of UCB, its officers, agents, or employees.

To the extent legally able, Member shall defend, indemnify and hold UCB, its officers, employees and agents harmless from and against any and all liability, loss, expense (including reasonable attorneys' fees), or claims for injury or damages arising out of the performance of this Agreement but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of Member, its officers, agents, or employees.

### 10. Limited Warranty and Liability

MEMBER UNDERSTANDS THAT SOFTWARE ARE EXPERIMENTAL IN NATURE, AND UCB MAKES NO REPRESENTATIONS, CONDITIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED WITH RESPECT TO ANY OF THE BDMC SOFTWARE OR INVENTIONS. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, UCB EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTY, CONDITION OR REPRESENTATION THAT THE SOFTWARE CORRESPONDS WITH A PARTICULAR DESCRIPTION, IS OF MERCHANTABLE QUALITY OR FIT FOR A PARTICULAR PURPOSE. UCB SHALL NOT BE LIABLE FOR ANY LOSS, WHETHER DIRECT, CONSEQUENTIAL, INCIDENTAL OR SPECIAL (AND WHETHER ARISING OUT OF CONTRACT OR TORT) WHICH MEMBER MAY SUFFER ARISING FROM ANY DEFECT, ERROR, FAULT OR FAILURE TO PERFORM WITH RESPECT TO THE SOFTWARE. NOTHING IN THIS AGREEMENT SHALL BE CONSTRUED AS A WARRANTY OR REPRESENTATION BY UCB THAT THE SOFTWARE ARE OR WILL BE FREE FROM INFRINGEMENT OF PATENTS, COPYRIGHTS,

TRADEMARKS, INDUSTRIAL DESIGNS OR OTHER INTELLECTUAL PROPERTY RIGHTS OF ANY THIRD PARTY. SOFTWARE IS DISTRIBUTED "AS IS", WITHOUT WARRANTY OR SERVICE SUPPORT. THE UNIVERSITY OF CALIFORNIA AND ITS EMPLOYEES ARE NOT LIABLE FOR THE CONDITION OR PERFORMANCE OF THE SOFTWARE.

### 11. General

This Agreement shall be interpreted in accordance with the laws of the State of California. UCB and Member are independent contractors; Member employees shall not be entitled to UCB employee benefits. All the taxes and expenses levied by the Chinese government applicable to Huawei's payment to UCB under the Agreement shall be paid by Huawei. All the taxes and expenses levied by the U.S. government applicable to Huawei's payment to UCB under the Agreement shall be paid by Berkeley. Any changes in the terms of this Agreement shall be valid only if made under joint written agreement and signed by the authorized representatives of both parties. This Agreement shall not be assigned by either party without the prior written consent of the other party. The UCB Business representative identified in Article 6 shall be notified concerning any inconsistency. This Agreement states the entire agreement of the parties and supersedes any prior discussions, proposals, negotiations and representations.

HUAWEI TECHNOLOGIES CO., LTD.

THE REGENTS OF THE UNIVERSITY  
OF CALIFORNIA

By: \_\_\_\_\_

(Signature)

By: \_\_\_\_\_

Yongjie Zhou

Title: \_\_\_\_\_

VP Hisilicon

Date: \_\_\_\_\_

2017-11-28

By: \_\_\_\_\_

(Signature)

By: \_\_\_\_\_

Eric Giegerich

Title: \_\_\_\_\_

Director, IAO

Date: \_\_\_\_\_

Nov. 2, 2017